Docket No.: 13146-00004-US Amendment to Office Action of October 19, 2009

AMENDMENTS TO THE CLAIMS

(Currently Amended) A process for preparing C(O)F₂ which comprises photooxidizing 1. a reaction mixture comprising CHClF2 or CHF3 with oxygen and wherein at least some of the radiation is in the range from 280 nm to about 750 nm and if CHClF₂ is used, the content in the reaction mixture of CHClF₂ is at least 5 mol% wherein 0.05 to 0.20 mol of elemental chlorine is present per mole of CHClF2 or CHF3.

- 2. (Previously presented) The process according to Claim 1, wherein the irradiation is undertaken in the absence of chlorine and the incident light have wavelengths including < 280 nm, or in that the irradiation is undertaken in the presence of elemental chlorine with light of a wavelength of ≥280 nm, in which case not more than 0.50 mol of elemental chlorine is present in the reaction mixture per mole of CHClF₂ or CHF₃.
- 3. (Cancelled)
- (Previously presented) The process according to Claim 1, wherein the irradiation is 4. carried out at a temperature of 20 to 300°C.
- (Previously presented) The process according to Claim 1, wherein the irradiation is 5. carried out at a pressure of 1 to 11 bar (abs.).
- 6. (Previously presented) The process according to Claim 1, wherein the reactants are present in gaseous form.
- 7. (Previously presented) The process according to Claim 1, wherein the reaction is carried out continuously.
- 8. (Previously presented) The process according to Claim 7, wherein the average residence time in the reactor is between 0.1 and 3 minutes.
- 9. (Previously presented) The process according to Claim 1, wherein CHClF2 is used as the starting compound.

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10. (Previously presented) The process according to Claim 1, wherein the irradiation is carried out at a temperature of 30 to 300°C.

- 11. (Previously presented) The process according to Claim 1, wherein the irradiation is carried out at a temperature of 50 to 90°C.
- 12. (Previously presented) A process for preparing C(O)F₂ which comprises photooxidizing CHClF₂ or CHF₃ with oxygen using
- (1) a irradiation lamp which emits only UV light of a wavelength greater than \geq 280 nm,
 - (2) a fluorescent tube or
 - (3) a high pressure mercury lamp.
- 13. (Previously presented) The process as claimed in claim 12, wherein said irradiation lamp is used.
- 14. (Previously presented) The process as claimed in claim 12, wherein said fluorescent tube is used.
- 15. (Previously presented) The process as claimed in claim 12, wherein said mercury lamp is used.
- 16. (Previously presented) The process according to Claim 12, wherein 0.05 to 0.20 mol of elemental chlorine is present per mole of CHClF₂ or CHF₃.
- 17. (Previously presented) Process according to Claim 13, wherein the irradiation is carried out at a temperature of 20 to 300°C and at a pressure of 1 to 11 bar (abs.).
- 18. (Previously presented) The process according to Claim 12, wherein the reactants are present in gaseous form.
- 19. (Original) The process according to Claim 12, wherein the reaction is carried out continuously.

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20. (Previously presented) The process according to Claim 12, wherein CHClF₂ is used as the starting compound.

- 21. (Previously presented) The process according to claim 20, wherein CHClF₂ is reacted with oxygen in the presence of elemental chlorine wherein an irradiation lamp is used which emits only light of a wavelength above or at 280 nm.
- 22. (Previously presented) The process according to claim 20, wherein CHClF₂ is reacted with oxygen in the presence of elemental chlorine wherein frequencies below 280 nm a masked out of the light emitted.
- 23. (New) A process for preparing C(O)F₂ which comprises photooxidizing a reaction mixture comprising CHClF₂ or CHF₃ with oxygen and wherein at least some of the radiation is in the range from 280 nm to about 750 nm and a ratio of CHClF₂ or CHF₃ to oxygen content is at most 1:1.
- 24. (New) The process as claimed in claim 1, wherein if CHClF₂ is used, the content in the reaction mixture of CHClF₂ is at least 5 mol%.
- 25. (New) The process as claimed in claim 23, wherein if CHClF₂ is used, the content in the reaction mixture of CHClF₂ is at least 10 mol%.
- 26. (New) The process according to Claim 23, wherein 0.05 to 0.20 mol of elemental chlorine is present per mole of CHClF₂ or CHF₃.
- 27. (New) The process as claimed in claim 1, wherein the ratio of CHClF₂ or CHF₃ to oxygen is from 1:.04 to 1:1.

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